

## ABSTRACT OF THE DISCLOSURE

An agitation type powder dissolving apparatus comprises a dissolving tank into which powder of spent nuclear fuel is to be supplied, an agitating member rotatably disposed in the dissolving tank, and rise inhibiting structure, disposed in the dissolving tank above the agitating member, for inhibiting the powder from swirling and rising due to rotation of the agitating member. The rise inhibiting structure is composed of a plurality of fixed blades for causing powder, which would otherwise swirl and rise due to rotation of the agitating member, to move downward. Each fixed blade has a descending slope with respect to a swirling direction during swirling and rising. This dissolving apparatus prevents non-dissolved particles from overflowing.